Amendments to the Drawings:

The attached sheet of drawings includes changes to Figure 1. This sheet, replaces the original sheet. In Figure 1, previously omitted element A has been added.

The attached sheet of drawings includes changes to Figure 2. This sheet replaces the original sheet. In Figure 2, previously omitted element A has been added and element 200 has been deleted.

Attachment: Replacement Sheets

Annotated Sheets Showing Changes

REMARKS/ARGUMENTS

Applicants have received the Office action dated November 17, 2004, in which the Examiner: (1) objected to Figure 1; (2) objected to the specification; (3) rejected claims 1-24 under 35 U.S.C. § 101; (4) rejected claims 1-21 under 35 U.S.C. § 112, 1st paragraph; (5) rejected claims 1 and 4-18 under 35 U.S.C. § 103(a) as being obvious over Stewart (U.S. Pub. No. 2002/0161688) in view of Chiang (U.S. Pub. No. 2004/0221292);[1] and (6) rejected claim 2-3 and 19-20 as obvious over Stewart in view of Chiang and further in view of LeMay.

With this Response, Applicants amend the specification, figures, and claims 1-5, 7-11, and 16, cancel claim 6, and submit new claims 21-22. Based on the arguments and amendments contained herein, Applicants respectfully request reconsideration and allowance of all pending claims.

I.   OBJECTION TO FIGURE 1

The Examiner objected to Figure 1 as having two paths from block 210 but allegedly not being clear as to which path is to be taken. Applicants submit that Figure 1, when read with the associated text from the specification, is clear and needs no amendment in this regard. The specification states that the conversation controller may be implemented either as "stateful" or "stateless." Page 5, lines 22-30. The specification explains that after block 210 execution continues with block 212 or 214 depending on whether the conversation controller is stateful or stateless. "The conversation controller may maintain and track the "state" of the conversation, i.e., implemented as stateful, step 212, or may retrieve the "state" of the conversation form the service, i.e., implemented as stateless, step 214." Page 7, lines 4-6.

The Examiner also requested an amendment to Figure 1 to show an interface to Figure 2. The attached drawing amendments provide the requested amendment.

---

[1] The Examiner also made reference to a publication by Jeong but did not use Jeong in rejecting any of the claims. Clarification is requested as to the Examiner's intention regarding the Jeong reference.

II. OBJECTION TO SPECIFICATION

The Examiner requested (Office action, page 3, item (A)) the references mentioned in the Background section of the application to be submitted in an Information Disclosure Statement ("IDS"). An IDS will be filed promptly.

As requested, the specification has been amended with regard to "explicitly" and the acronyms "CDL" and "WSDL."

Applicants disagree with the Examiner's contention on page 3, item (C), that Applicants' use of the word "may" in various verb phrases throughout the specification is impermissible under the enablement requirement of § 112, first paragraph. Applicants are unaware of any statute, case law, or MPEP requirement that supports the Examiner's position. By using the word "may," Applicants are simply acknowledging that other embodiments of the invention are possible. To amend the specification to positively describe an embodiment without the word "may" as apparently required by the Examiner would be to risk, at this point, overly narrowing the scope of Applicants' disclosure and thus the claims. Withdrawal of this ground of objection is respectfully requested. If the Examiner continues to maintain this rejection, support for the Examiner's position is respectfully requested.

In answer to the Examiner's question on page 4, item (D) regarding how one skilled in the art would know which path—212 or 214—to follow, the specification clearly answers this question as explained above.

The Examiner also objected to text at lines 19-23 and 27-30 on page 7 of the specification. The text at line 19 has been amended to address the Examiner's concern regarding that passage. Figures 1 and 2 have been amended to address the Examiner's concern regarding lines 27-30.

III. THE § 101 REJECTIONS

The Examiner rejected claim 1 as not being tangibly embodied. While Applicants disagree with the rejection, Applicants have amended claim 1 and all claims dependent thereon to require that a "conversation controller" is performing the recited actions.

Claim 11 is directed to "a conversation controller" that comprises an "incoming context handler," an "interaction handler coupled to the incoming context handler," and a "dispatch handler coupled to the interaction handler." Applicants amend claim 11 to require a processor on which the various handlers execute.

Claim 16 is directed to a "computer readable medium comprising instructions." The Office action is unclear why this claim is allegedly directed to non-statutory subject matter. The Examiner suggested claiming code residing in memory that produces a tangible result. Applicants believe that is exactly what claim 16 already recites. Clarification of this rejection is respectfully requested to the extent that the Examiner chooses to reject claim 16 for this reason.

IV. THE § 112, FIRST PARAGRAPH REJECTIONS

The basis of the Examiner's enablement rejection is that "no implementation details were provided as to the determining/identifying of valid 'document types.'" The specification, however, explains that the determination of valid document types is based on the conversation specification. The specification, for example, states that "given a conversation specification, an interaction identifier from the specification, and a document type representing an input document, the conversation controller may return a boolean signal indicating whether or not the document type may be accepted as a valid input for that interaction." Page 7, lines 28-31. For at least this reason, Applicants traverse the enablement rejections.

V. THE ART REJECTIONS

Applicants respectfully submit that claim 1 is patentable for any or all of the following reasons. First, claim 1 requires "the conversation controller verifying whether the message is of one of the valid input document types for the current state." For this limitation, the Examiner turned to paragraph [0157] of Stewart, which, according to the Office action, states: "knows how to handle the type of message received." Paragraph [0157] of Stewart does not include the statement indicated by the Examiner. Instead, paragraph [0157] states:

[0157] While collaborative commerce is driven by the desire to automate and streamline e-business processes, one can not completely eliminate the ability to involve humans in the execution of e-business processes. Unlike other B2B platforms, the invention's , process capabilities provide the ability to define and direct e-business process exceptions to human users for resolution. The combination of a collaboration server and a workflow server in one collaboration system also delivers unparalleled flexibility to drive and integrate cross-enterprise collaborative processes, enterprise applications, and transactions on either side of the firewall using a single process technology.

Paragraph [0157] appears to be completely irrelevant to the subject matter of claim 1. Applicants, however, did find a reference to handling message types in paragraph [0151] of Stewart. "In this approach, each message can then be routed to the specific Decoder that knows exactly how to handle the type of message being received." Stewart, para. [0151]. That sentence says nothing about "a current state" and, for at least that reason, certainly cannot be said to read on the limitation of "verifying whether the message is of one of the valid input document types for the current state." The other art of record is also deficient in this regard. For at least this reason, claim 1 and all claims dependent thereon are allowable over the art of record.

Claim 1 is patentable for an additional reason as well. As amended, claim 1 specifies that "the conversation controller receiving a conversation information from the service, the conversation information specifying a structure of conversations supported by the service." None of the art of record appears to teach or even suggest this limitation. For this additional reason, claim 1 and all claims dependent thereon are allowable over the art of record.

Claim 1 has also been amended to require that "the conversation controller use[s] the received conversation information to determine valid input document types for the current state." Applicants do not find this limitation in any of the art of record. For this additional reason, Applicants submit that claim 1 and all claims dependent thereon are allowable over the art of record.

As amended, claim 11 requires an interaction handler that "validates the document type based on a conversation specification received from the service." Applicants do not find this limitation in any of the art of record. Accordingly, Applicants respectfully submit that claim 11 and all claims dependent thereon are allowable over the art of record.

Amended claim 16 requires "receiving a conversation specification from the service, the conversation specification specifying a structure of conversations supported by the service." As explained above, none of the art of record teaches or suggests this limitation in the claimed context. Claim 16 has also been amended to require: "using the conversation specification, determining valid input document types for the current state." This limitation is absent from the art of record. For either or both of these reasons, claim 16 and all claims dependent thereon are allowable.

VI.   NEW CLAIMS 21-22

Newly submitted claim 21 depends from claim 1 and thus is patentable at least for the same reasons as claim 1. In addition, claim 21 is patentable for requiring the conversation to receive "a conversation specification from the client defining the valid interactions with the client." Applicants do not find this limitation in the art of record.

Newly submitted claim 22 depends from claim 16 and thus is patentable at least for the same reasons as claim 16. In addition, claim 22 is patentable for requiring the instructions to comprise "receiving a conversation specification from the client defining the valid interactions with the client." Applicants do not find this limitation in the art of record.

VII.   CONCLUSION

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may

be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.
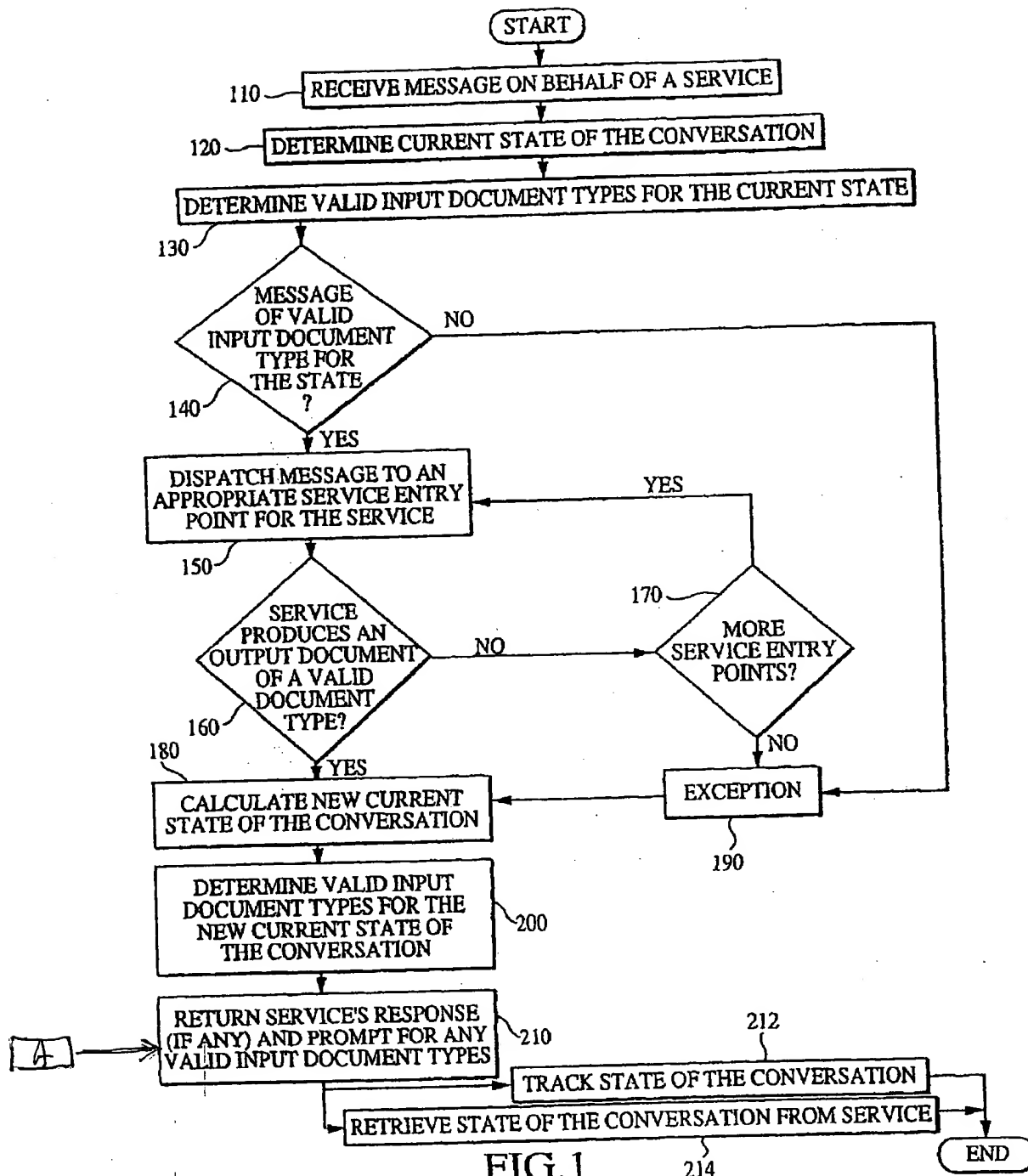
Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,

Jonathan M. Harris
PTO Reg. No. 44,144
CONLEY ROSE, P.C.
(713) 238-8000 (Phone)
(713) 238-8008 (Fax)
ATTORNEY FOR APPLICANTS

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
Legal Dept., M/S 35
P.O. Box 272400
Fort Collins, CO 80527-2400

START

110 — RECEIVE MESSAGE ON BEHALF OF A SERVICE

120 — DETERMINE CURRENT STATE OF THE CONVERSATION

DETERMINE VALID INPUT DOCUMENT TYPES FOR THE CURRENT STATE

130

MESSAGE OF VALID INPUT DOCUMENT TYPE FOR THE STATE ?

140

NO

YES

DISPATCH MESSAGE TO AN APPROPRIATE SERVICE ENTRY POINT FOR THE SERVICE

150

YES

SERVICE PRODUCES AN OUTPUT DOCUMENT OF A VALID DOCUMENT TYPE?

160

NO

170

MORE SERVICE ENTRY POINTS?

NO

180

YES

CALCULATE NEW CURRENT STATE OF THE CONVERSATION

EXCEPTION

190

DETERMINE VALID INPUT DOCUMENT TYPES FOR THE NEW CURRENT STATE OF THE CONVERSATION

200

RETURN SERVICE'S RESPONSE (IF ANY) AND PROMPT FOR ANY VALID INPUT DOCUMENT TYPES

210

212

TRACK STATE OF THE CONVERSATION

RETRIEVE STATE OF THE CONVERSATION FROM SERVICE

END

FIG.1

214

200
FIG.1

220 — CLIENT WANTS TO BE DIRECTED BY CONVERSATION CONTROLLER ? → NO → A — 210 FIG.1

YES

230 — ARE THERE VALID INPUT DOCUMENT TYPES FOR THE NEW STATE ?

YES

240 — INVOKE APPROPRIATE CLIENT METHODS THAT MAY PRODUCE NEW INPUT DOCUMENTS THAT ARE VALID IN THE NEW STATE

250 — CLIENT PRODUCES A VALID NEW INPUT DOCUMENT ? → NO

YES

260 — SEND NEW INPUT DOCUMENT TO THE SERVICE

FIG.2